

Movement, Mindfulness and Mental Health

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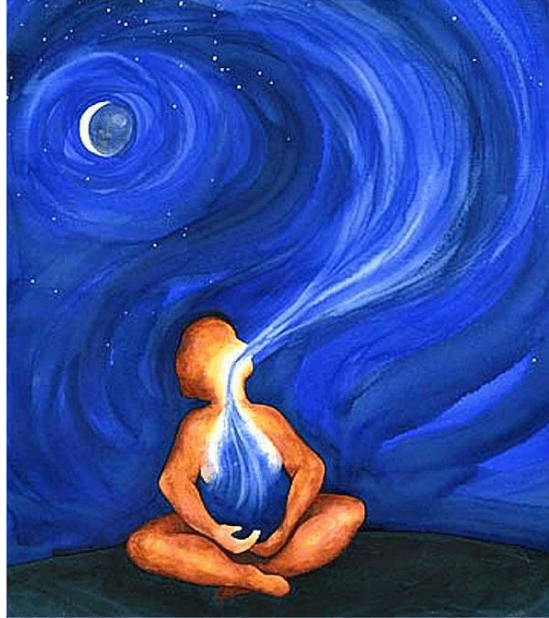




Overview

- Breathing/Pranayama
- Yoga/Asana
- Mindfulness/Meditation
- Connection to Trauma, Impulsivity and Substance Use
- Resilience
- Putting it into practice
- Limitations/concerns/barriers
- Resources

Breath



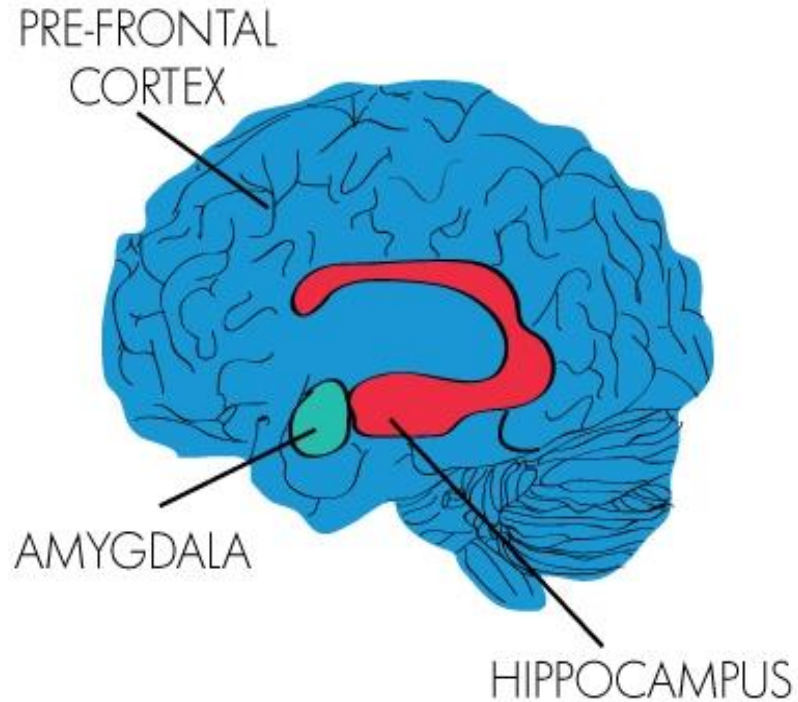
- Pranayama is the fourth limb of Patanjali's eight-limbs of yoga
- defined as the "control of life force,"
- aimed at increasing vital energy in the body and mind.



“Breath is the bridge which connects life to consciousness, which unites your body to your thoughts. Whenever your mind becomes scattered, use your breath as the means to take hold of your mind again”

-Thich Nhất Hạnh

The Brain



The Biology of Toxic Stress

Clip from the film *Resilience*

(Directed by James Redford; Written by Jen Bradwell)

- <https://www.youtube.com/watch?v=Z4CD6jyWw2A>



Regulation: Top Down or Bottom Up?

- Top-Down regulation involves strengthening the capacity of your medial prefrontal cortex to monitor your body's sensations. Mindfulness meditation and yoga can help with this awareness.
- Bottom-up regulations involves “recalibrating” the autonomic nervous system. We can access the ANS through breath, movement and through touch.

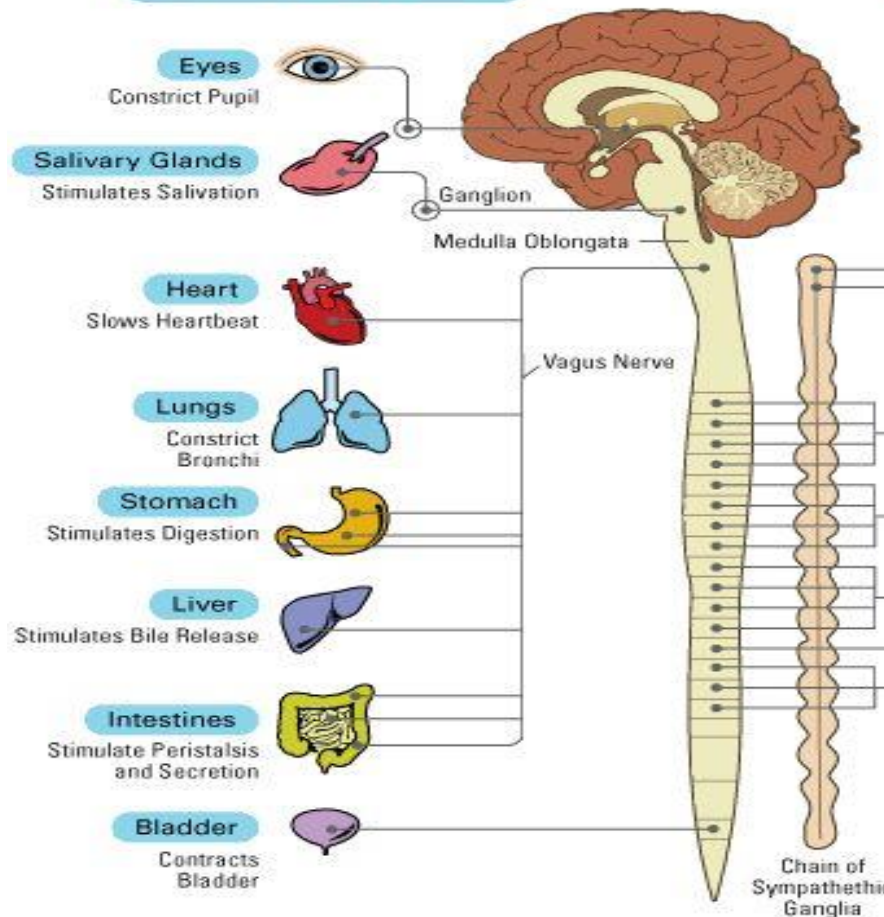
“ Breathing is one of the few body functions under both conscious and autonomic control.”



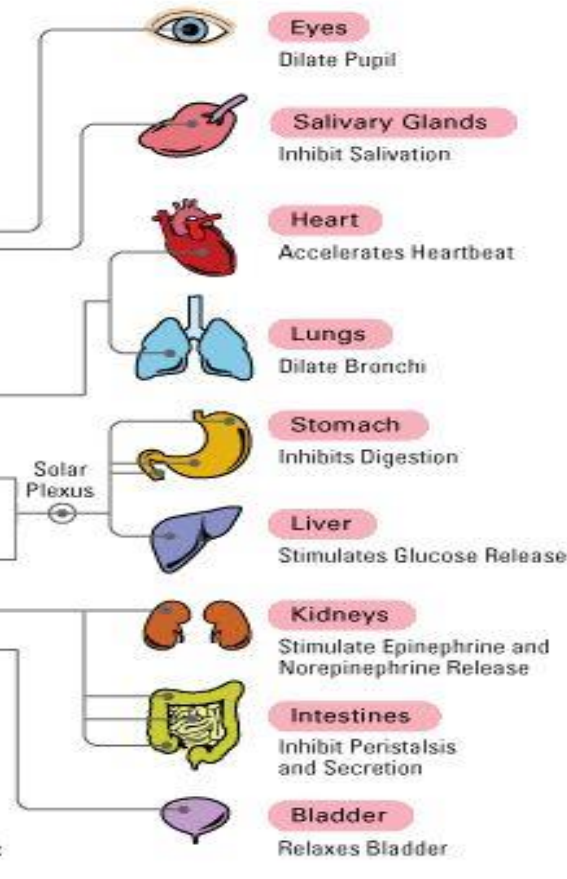
Pranayama/breath and the Autonomic Nervous System (ANS)

- **Sympathetic nervous system (SNS)** is the fight-or-flight response. It uses chemicals like adrenaline to help the body and brain to take action. It helps us to mobilize energy to complete a task (survival or day to day tasks). Originates in the Spinal cord (thoracic and lumbar) Our bodies need this adrenaline and in small doses the SNS is essential. Problem when it goes into overdrive.
- **Parasympathetic nervous system (PNS)** often called “rest and digest” or “calm and connect” system. Uses acetylcholine to help regulate basic body functions (digestion and sleep) and allows us to recoup from the stressors of life. Originates in the sacral region of the spinal cord and the Medulla.
- **Heart Rate Variability (HRV)** – measures the balance between the SNS and PNS.
 - When we inhale we stimulate the SNS (results in an increase heart rate)
 - When we exhale we stimulate the PNS (results in decreasing how fast the heart beats)

Parasympathetic

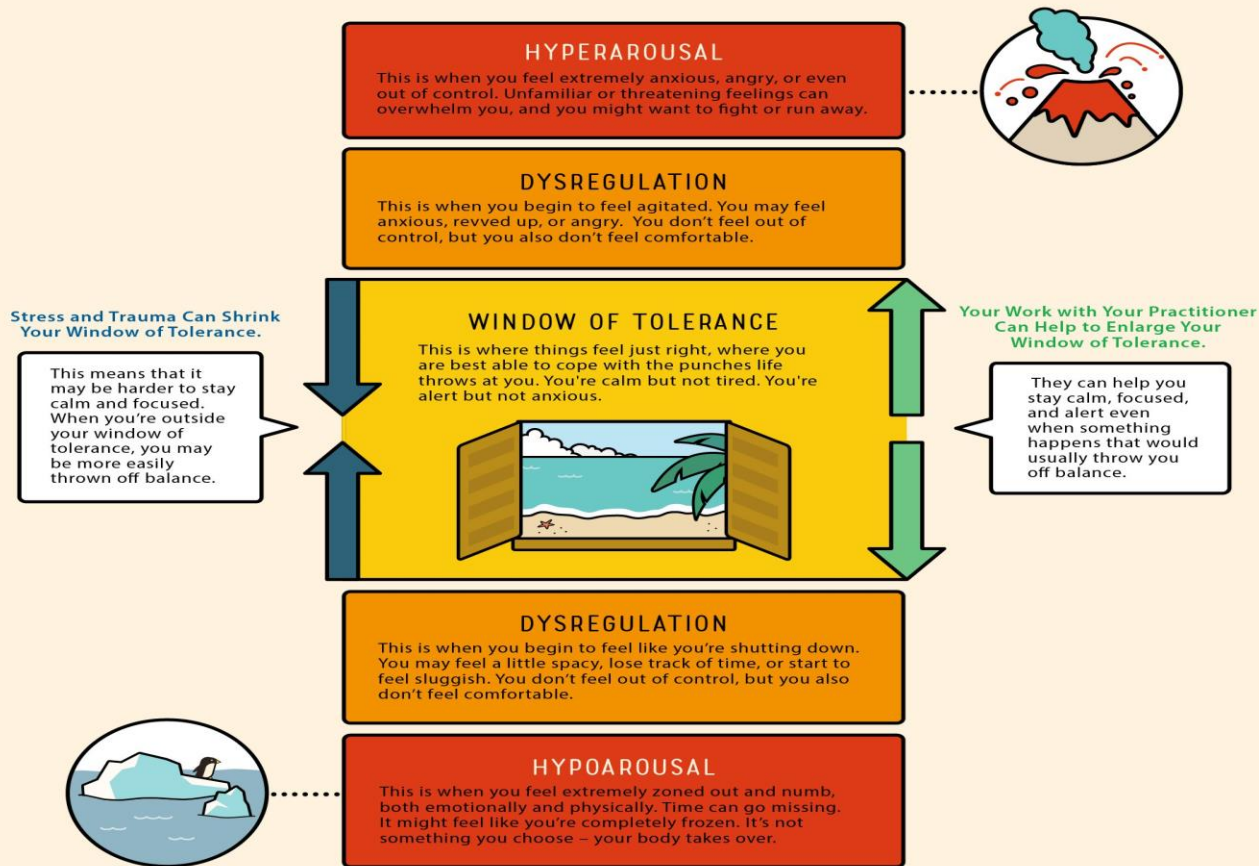


Sympathetic



Schema Explaining How Parasympathetic and Sympathetic Nervous Systems Regulate Functioning Organs

How Trauma Can Affect Your Window of Tolerance



Pranayama exercises



- Ujai Breath
- Breathing to the count of 4/8 (longer exhale)
- Box Breathing
- Inhale 4, hold 7, exhale 8
- Focus on the exhale - activated the relaxing PNS
- 3 part breath
- Kids breathing exercises (candle breath, flower breath, bear breath)

Yoga



- **Asana** – traditionally defined as a “comfortable seat” ; preparing for meditation
- 3rd limb of Yoga and it is the practice of physical postures
- According to Patanjali, “Asana aims to keep the body steady and easy for the meditation practice that prepare us to gain mastery of the thought patterns of the mind so that self-realization can be experienced.”
- Meant to keep physical body health, find flexibility and strength, stimulate the physiological systems of the body, help to develop mindfulness and focus for meditation
- Connection of the mind and body and breath
- Trauma-Informed Yoga ***

Yoga and Mental Health

Self-Regulation



- Individuals with PTSD: mindfulness can lead to increased emotion regulation
- Yoga provides chance to observe fear-related sensations and can counteract avoidance
- “Individuals with PTSD also show impaired awareness of bodily sensations and a lack of cognizance of the connection between environmental stimuli and internal reactions – two areas that are addressed in yoga.” – Price, Spinazzola, Musicaro, Turner, Suvak, Emerson and van der Kolk 2017
- “An essential aspect of recovering from trauma is learning ways to calm down, or self-regulate. For thousands of years, Yoga has been offered as a practice that helps one calm the mind and body. More recently, research has shown that Yoga practices, including meditation, relaxation, and physical postures can reduce autonomic sympathetic activation, muscle tension, and blood pressure, improve neuroendocrine and hormonal activity, decrease physical symptoms and emotions distress and increase quality of life.” – Emerson, 2009

Self- Awareness




- “ Experientially, women with complex trauma histories often feel disconnected from their bodies and struggle to feel safe in their own skin. This type of trauma exposure inhibits the development of a basic sense of security and trust in oneself and others. It is a challenge to hold a coherent and positive sense of self that is not based in self-doubt or shame, Consequently, tasks of basic self care are often neglected.” – Rhodes, 2015
- “Pathways of Interoception” – Jackson, 2014
- “One of the clearest lessons from contemporary neuroscience is that our sense of ourselves is anchored in a vital connection with our bodies. We do not truly know ourselves unless we can feel and interpret our physical sensations; we need to register and act on these sensations to navigate safely through life. While numbing (or compensatory sensation seeking) may make life tolerable, the price you pay is that you lose awareness of what is going on inside your body and, with that, the sense of being fully, sensually alive.” – van der Kolk, 2014

Peaceful embodiment

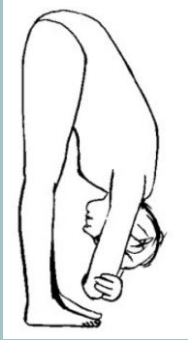
- Rhodes, 2015
- “Participants experienced an improved connection with and sense of ownership and control over their bodies, emotions and thoughts. This was marked by a growing sense of self-efficacy, and feelings that they were not longer defined by their trauma history, living in the past or reacting based on the past.”
- “The growing sense of connection and control over their bodies, thoughts, emotions, and behaviors enabled movement toward an embodied sense of peace, which included feelings of “**safety**,” “**calmness**,” “**groundedness**,” “**presence**”, “**inner strength**,” and “**self-confidence**”. In contrast to experiencing that the “mind and body are separate things that have to fight with each other,” participants described feeling more “**whole**.” The sense of peace that women claimed through yoga was also marked by experiences of “**self-acceptance**” and “**authenticity**.” Becoming more connected with their minds and bodies in the present, believing that they had the power to be who they wanted to be, and in greater control of their experiences and actions, offered women the sense that they were becoming their true selves. They developed a greater sense of contentment, serenity, and a greater appreciation of everyday things.

Yoga for Children/Adolescents

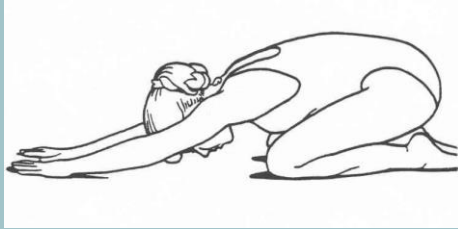
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- Help cope with stress and contribute positively to balance in life, well-being, and mental health.
 - physical and mental well-being
 - Improve resilience, mood and self-regulation
 - “Children function as an agency for their own well-being and have the evolving capacity to be partners of wellness with their families, friends, and society” - Hagan and Nayar, 2014
 - grows innate abilities and promotes mastery (strengthening body, increasing energy, building coping skills, enhancing concentration and memory)
 - protect and preserve (maintaining self esteem while faced with challenges)
 - positive self concept
 - Studies that focus on the efficacy of yoga programs in schools, yoga programs in areas of conflict, children with complex trauma, children with ACE's
 - Therapeutic yoga (ADHD, anxiety, depression, eating disorders)

Kaley-Isley, 2010

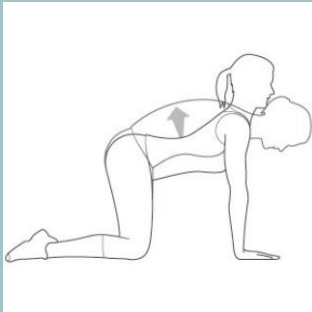
Yoga Poses



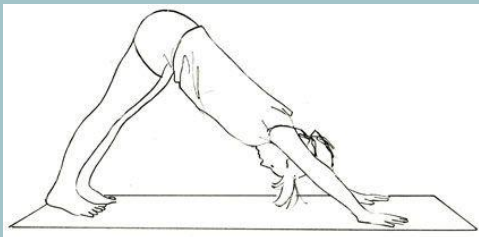
Forward fold (Uttanasana) – different variations



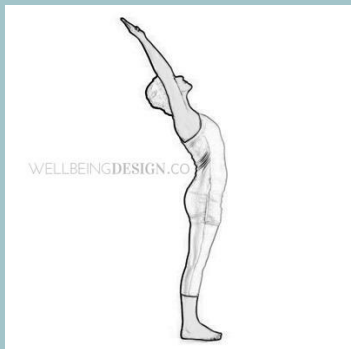
Child's pose (Balasana)



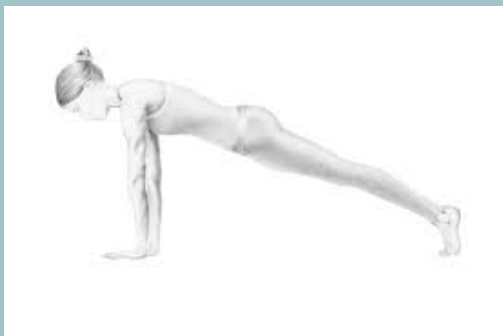
Cat/Cow (Marjaryasana/Bitilasana)



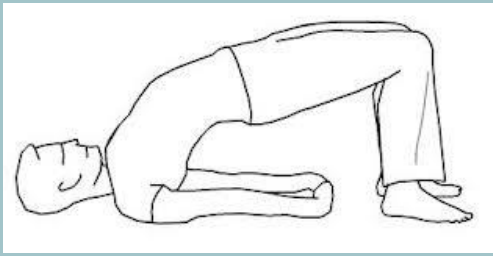
Downward facing dog (Adho Mukha Svanasana)



Mountain Pose (Tadasana)
Upward Salute (Urdhva Hastasana)



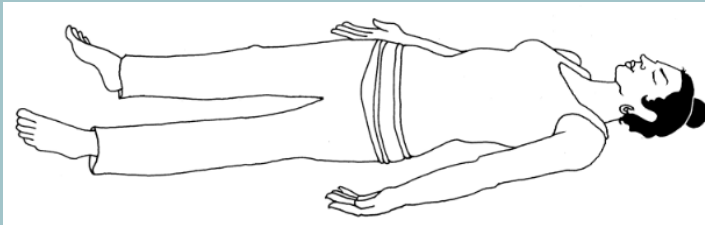
Plank pose (Phalakasana)



Bridge pose (Setu Bandha Sarvanghasana)



Legs up the Wall (Viparita Karani)



Corpse pose (Savasana)



om...

ZZZ...

I hope the dog
didn't pee on
the rug.

What time does
the game start?

Did I ever send
that email?

what time
is it?

I can't get that
Taylor Swift song
out of my head...

My neck hurts

What's for
dinner?

Relax...

Did I just snore?





Mindfulness

- Awareness that emerges through paying attention on purpose
 - Being in the present moment
 - Nonjudgmental
 - Self awareness
 - Self regulation
 - Take charge of emotions and behaviors
 - Helps children/adolescents become more connected and empathic
 - Meditation practices
 - Interoception *
 - “Teaching stressed children how to regulate emotions may provide them with new skills that promote healthy stress-response systems in the brain and may also enable them to avoid the downward trajectory faced by many at-risk youth as they progress through adolescence into adulthood.”
- Mendelson, T., Greenberg, M.T., Dariotis, J.K., Feagans Gould, L., Rhoades, B.L. & Leaf, P.J. (2010)



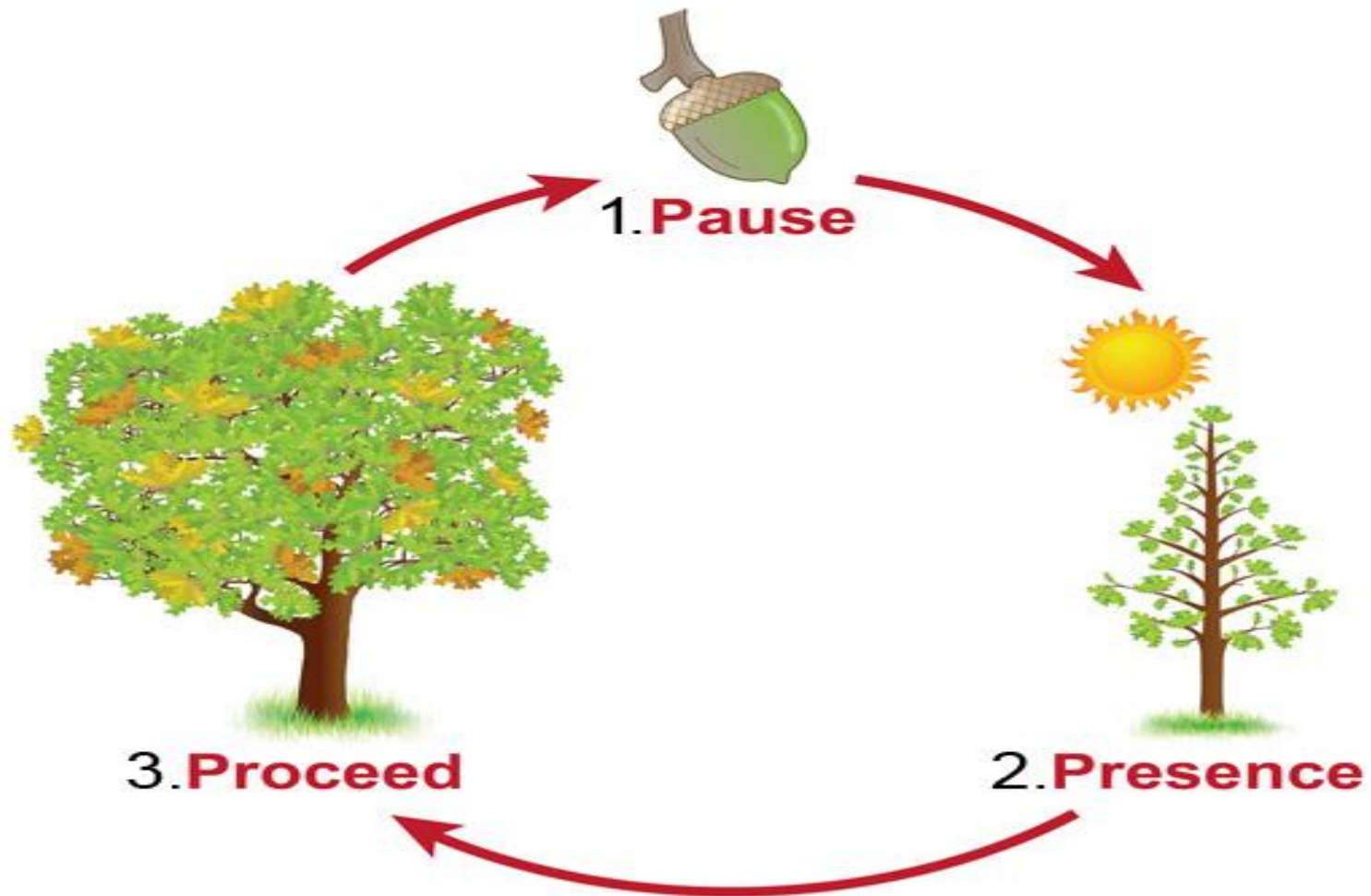
*“Without mindfulness, there is no therapy...
All growth occurs because you are in a state of
mindfulness. Without mindfulness, there is no
growth.”*

-Bessel van Der Kolk



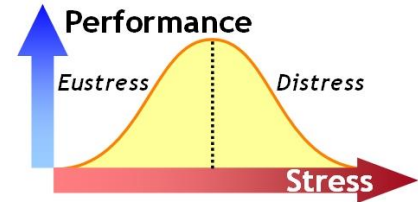
Mindfulness exercises

- Mindful eating
- Mindful breathing
- Body scan
- Mindful movement (walking)
- Mindful listening
- Mindful seeing
- 3 P's: Pause, Presence, Proceed



Mindfulness, Impulsivity and Substance Use

- Conscious Breathing
- Heart Rate Variability
- Vagal Tone
- Interoception
- Window of Tolerance
- Trauma-Informed Care
- Eustress vs. Distress
- NEAR- Neuroscience, Epigenetics, ACES, Resilience
- Promotion of Wellbeing/Resilience (personal, interpersonal, community, across the lifespan)



Resilience





Putting it into practice

- For clients
- For self care
- For the workplace



Limitations/concerns/challenges

- Logistics
- Experience/training
- Changing habits/influencing perception
- Specific poses for certain clients
- Commitment/consistency

Resources



- Mindresilience.org
- <https://www.acesconnection.com/>
- <https://www.nearathome.org/>
- Holistic Life Foundation <http://hlfinc.org/>
- Free Baltimore Yoga Project
- Body Wise Foundation <https://www.bodywisefoundation.org/>
- Radiant Child <http://childrensyoga.com/>
- Street Yoga <http://streetyoga.org/>
- Yoga pretzel cards
- Breathe Like a Bear by Kira Willey
- Mindfulness and Yoga Skills for Children and Adolescents by Barbara Neiman
- The Body Keeps the Score by Bessel Van Der Kolk
- Trauma Center Trauma Sensitive Yoga at the Justice Resource Center
http://www.traumacenter.org/clients/yoga_svcs.php

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Thank You!

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